

The Examiner stated several concerns in regards to the Applicant's as asserted in response to the first office action. The Examiner states that the Applicant has not provided temperature ranges, vibrational data, or corrosive data to dissuade the Examiner from believing the Denzene reference could not withstand the same conditions. Furthermore, the Examiner asserts that the Applicant fails to fully and clearly explain the significance of having this circuit assembly for the specific purpose of use with an engine controller. The Examiner further states that the novelty of use within an engine controller has not been adequately explained.

The Applicant would respectfully like to address these concerns. In regards to the Applicant acknowledges that the conformal coatings taught by Denzene are utilized to protect the circuitry against corrosive environments. The Applicant notes, however, that the thin layer approach to conformal coatings, as taught by Denzene and used in the industry, are commonly applied in thin layers that would not substantially reduce damage to the components due to vibration. The use of the passivation layer as taught by the present invention, however, provides a thick application helping the electronic components withstand vibration. The Applicant notes that an outdoor telecommunications box, commonly mounted stationary objects outdoors, is by nature not intended to be subjected to the vibrations experienced by any object mounted within inches of a six-cylinder engine rotating at 6000 rpm's while traveling over an imperfect blacktop surface at speeds of over fifty miles per hour.

Furthermore, the Applicant would like to explain that automotive engine controllers are commonly formed as single permanently assembled units. The units are assembled in this fashion to conserve space, lower cost, and insure proper sealing and protection from the environment. The components installed into automobiles are expected to run for thousands of miles in temperatures ranging from Arizona heat to Michigan snow while driving over potholes and curbs. Therefore, the concept of utilizing plug-in components for critical components positioned in the most hostile environment of the automobile is not intuitive as the critical nature of such components makes the loss of contact from such an element due to vibration unacceptable. The use of similar systems in low vibrational applications such as telecommunications or home computer usage, therefore, does not render the use in such a structure designed for such a drastically difference application and environment obvious. It is one thing to contemplate plug in cables, wherein the flexibility and relatively low mass of the cable may have little impact, it is another to subject an entire partitioned circuit to such

loading. Therefore, the Applicant asserts that the claimed engine controller is in a significantly different field and therefore patentably distinct.

Additionally, the Applicant would like to point out that the present application claims limitations that are not simply the use of a heat sink for "removing of heat from those electronic components". The Applicant admits that the use of a heat sink for removing heat is not in and of itself patentable. The Applicant, however, notes that this is not the limitation that is claimed. What is claimed is a heat sink as part of the "partitioned assembly" that in turn is part of the engine control assembly. By moving the heat sink into the partitioned circuit housing, the present invention enables individualized circuits to be practically spread out into the partitioned circuits wherein prior assemblies would have required they were spaced near each other to insure contact with the main heat sink commonly used. This is not taught by either cited reference, nor is it rendered obvious in light of the knowledge of the functioning of heat sinks alone.

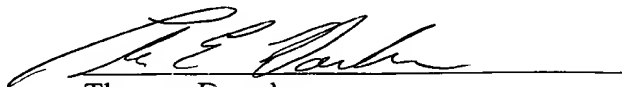
In light of the above explanations, the Applicant respectfully requests the Examiner to reconsider the rejections of claims 8-17.

CONCLUSION

The Applicant would like to thank the Examiner for his assistance. In light of the above amendments and remarks, Applicant submits that all objections and rejections are now overcome. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited.

Should the Examiner have any questions or comments that would place the application in better condition for allowance, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,



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